

# **TRANSISTOR**

## **ABSTRACT OF THE INVENTION**

5        A transistor that at least has one of the following characteristics: First, the gate electrode is located outside the gate line, such that the whole transistor is located outside the gate line. Second, the projection of the semiconductor layer on the substrate is totally located inside the projection of the gate electrode on the substrate. Third, the drain cross the gate electrode, such that the projection  
10 of the cross-section is totally located inside the projection of the gate electrode. Final, the separated distance between the gate line, the gate electrode, the drain and the source is adjusted to let the variation of each of  $C_{gd}$  and  $C_{ds}$  be not obviously affected by the alignment deviation.